

**IN THE CLAIMS**

This listing of the claims replaces all prior listings.

**Listing of Claims:**

1. (Currently Amended) A light control device comprising:  
opposing substrates with a gap therebetween;  
a liquid crystal ~~element in which liquid crystal [[is]] in said gap sealed between opposed~~  
~~said opposing substrates, wherein said liquid crystal [[is]] being a polymer network liquid~~  
crystal[[,]]; and

optically transparent electrodes on gap-side surfaces of each of said opposing substrates  
and in contact with said liquid crystal,

wherein,

~~[[a]] said gap between said opposed opposing substrates [[in]] along an effective optical~~  
~~path [[is]] has a width between about 4  $\mu\text{m}$  [[-]] and about 11  $\mu\text{m}$~~

2. (Currently Amended) The light control device according to claim 1, wherein said gap width is between about 6 [[-]] and 10  $\mu\text{m}$ .

3. (Currently Amended) The light control device according to claim 1, wherein said  
opposing substrates are optically transparent ~~optically transparent electrodes are provided on said~~  
~~opposed surfaces of optically transparent said opposed substrates, respectively.~~

4. (Currently Amended) The light control device according to claim 1, further comprising:

a temperature detecting section which detects ~~the environmental~~ a temperature of said liquid crystal element; and

a pulse control section which controls ~~[[the]]~~ an applied voltage for driving said liquid crystal element, according to said ~~environmental~~ temperature detected by said temperature detecting section.

5. (Currently Amended) The light control device according to claim 4, wherein said applied voltage is an ~~effective~~ AC pulse voltage.

6. (Currently Amended) A ~~driving~~ method for driving of a light control device having opposing substrates with a gap therebetween, a liquid crystal element in which liquid crystal [[is]] in said gap sealed between opposed said opposing substrates, said liquid crystal being a polymer network liquid crystal, optically transparent electrodes on gap-side surfaces of each of said opposing substrates and in contact with said liquid crystal, and [[a]] said gap between said opposed opposing substrates [[in]] along an effective optical path [[is]] has a width between about 4  $\mu\text{m}$  [[-]] and about 11  $\mu\text{m}$ ; wherein, said driving method comprising:

applying a voltage for driving said liquid crystal element;

detecting a temperature of said liquid crystal element; and

controlling [[an]] said applied voltage for driving said liquid crystal element, according to the environmental detected temperature of said liquid crystal element.

7. (Currently Amended) The ~~driving~~ method for driving of a light control device according to claim 6, wherein a temperature detecting section which detects the environmental temperature of said liquid crystal element is provided and said applied voltage is controlled according to the environmental temperature detected by said temperature detecting section.

8. (Currently Amended) The ~~driving~~ method for driving of a light control device according to claim 6, wherein an effective AC pulse voltage is used as said applied voltage is an AC pulse voltage.

9. (Currently Amended) An image pickup apparatus, wherein any of said the light control device according to any of claims 1 to 5 is disposed in an optical path of an image pickup system of said image pick up apparatus.

10. (New) The light control device according to claim 4, wherein said detected temperature is an environmental temperature.